

ATTORNEY'S DOCKET NO: P0557/7030

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Norman William MACLEOD
Serial No: --
Filed: Herewith
For: MANUFACTURE OF FOOTWEAR

#6/A
Bloss

Assistant Commissioner for Patents
Washington, D.C. 20231

PRELIMINARY AMENDMENT

Before examination, please amend the above application as follows:

In The Claims

Please delete claims 1-21.

Please insert the following claims 22-41:

-- ²¹22. A method of making an item of footwear such as a shoe or a boot, including the steps of:

forming an upper for the item of footwear on a forming last, the forming last including a body having the general shape of a foot around which the upper of the footwear item is to be formed, the body having a base corresponding to a sole of the foot shape; and

moulding a rubber sole onto the formed upper while it is still mounted on the forming last, the forming last being heated before and/or during the moulding step,

wherein the step of heating the forming last includes heating the base of the last body, whilst substantially preventing the heating of parts of the body other than the base.

²²23. A method as claimed in claim 22, wherein the step of moulding the rubber sole includes:

placing the last with the upper thereon adjacent a mould assembly having a plurality of mould parts;

arranging the mould parts adjacent the base of the last and the upper thereon to define a mould cavity for the rubber sole,

injecting rubber into the cavity; and

applying heat and pressure to the rubber in the cavity to form the sole in adherence with the upper.

²³
~~24~~. A method as claimed in claim ²²~~23~~, including the step of heating the mould parts before and/or during formation of the rubber sole to vulcanise the rubber.

²⁴
~~25~~. An apparatus for making an item of footwear such as a shoe or a boot, including:

a forming last including a body mimicking the general shape of a foot around which an upper of the item of footwear is to be formed, the body having a base corresponding to a sole of the foot shape; and

means for moulding a rubber sole onto a formed upper while it is still mounted on the forming last;

the apparatus including means for heating the base of the body of the forming last, and including means for substantially preventing the heating of parts of the body other than the base.

²⁵
~~26~~. An apparatus as claimed in claim ²⁴~~25~~, wherein the means for heating the base is located within the last.

²⁶
~~27~~. An apparatus as claimed in claim ²⁴~~25~~, wherein the base includes a metallic portion to which heat is transmissible from the heating means.

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~~28.~~ An apparatus as claimed in claim ~~27~~²⁶, wherein the metallic portion includes at least one metal plate member which extends over the base of the last body and wherein the heating means includes at least one electrically activated heating element located inside the last adjacent an inner side of said at least one plate member.

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~~29.~~ An apparatus as claimed in claim ~~25~~²⁴ wherein the means for moulding the rubber sole includes a mould assembly having:

a plurality of mould parts to be arranged adjacent the base of the last and the upper of the footwear item formed thereon to define a mould cavity for the rubber sole; and

an injector for injecting a rubber mixture into the mould cavity.

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~~30.~~ An apparatus as claimed in claim ~~29~~²⁷, wherein the moulding means includes means for compressing the rubber received within the mould cavity and means for heating the mould parts to vulcanise the rubber in the mould cavity.

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~~31.~~ A last for making an item of footwear such as a shoe or a boot, including a body mimicking the general shape of a foot around which an upper of the item of footwear is to be formed, the body having a base corresponding to a sole of the foot shape and the last further including means for heating the base of the last body and means for substantially preventing the heating of parts of the body other than the base.

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~~32.~~ A last as claimed in claim ~~31~~³⁰, the means for substantially preventing the heating of parts of the body other than the base comprising insulation means between the base and the rest of the body.

³²
~~33~~. A last as claimed in claim ~~31~~³⁰, wherein the means for heating the base is located within the last.

³³
~~34~~. A last as claimed in claim ~~31~~³⁰, wherein the base includes a metallic portion to which heat is transmissible from the heating means.

³⁴
~~35~~. A last as claimed in claim ~~34~~³³, wherein the metallic portion includes at least one metal plate member which extends at least partially over the base of the body member.

³⁵
~~36~~. A last as claimed in claim ~~35~~³⁴, wherein the heating means includes at least one electrically activated heating element located inside the last adjacent an inner surface of said at least one plate member.

³⁶
~~37~~. A last as claimed in claim ~~36~~³⁵, wherein the last body includes a recess or cavity for receiving and housing said at least one electrically activated heating element adjacent said at least one plate member, the said insulation means serving to insulate parts of the body other than the base from heat generated by the at least one heating element.

³⁷
~~38~~. A last as claimed in claim ~~37~~³⁶, wherein the insulating means includes a layer of thermal insulation material located between the at least one heating element and non-metallic parts of the last body.

³⁸
~~39~~. A last as claimed in claim ~~31~~³⁰ wherein the last body includes a heel portion and a toe portion, the heel portion and the toe portion being separable from one another to facilitate removal of a finished item of footwear from the last.

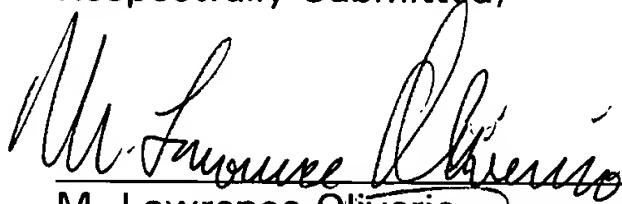
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~~39~~
~~40~~. A last as claimed in claim ~~31~~³⁹ wherein the last body is made at least partially from plastic.

~~40~~
~~41~~. A last as claimed in claim ~~40~~³⁹ wherein the last body is made predominantly from plastic, such as polyethylene. --

Respectfully Submitted,



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